



Looking back at the Belgian development cooperation in the water sector in Rwanda over the past 10 years

Updated in May 2020

Status of SDG6

A few charts on the status of water resources and on SDG6 in Rwanda are in Figure 1 to Figure 4. More detailed and updated information can be found on the [Rwanda's country snapshot](#) provided in the [UN-Water SDG6 data portal](#), and the WHO – UNICEF Joint Monitoring Program's [Rwanda's country file](#).

Belgian and international ODA to water sector

Based on the database reporting the Belgian ODA, 28.000.000 EUR have been allocated to the water sector in Rwanda between 2008 and 2019, which corresponds to 4% of the total Belgian ODA to water sector through bilateral aids (Figure 5), and to 5% of the total Belgian ODA to the country (Figure 6). Main contractors have been Enabel and Join For Water (Figure 7). Projects and programs have mainly been implemented in basic and large water infrastructures and agricultural water. The list of water program and projects are in Table 1. In addition to Belgium, Swiss and German development cooperation also currently have a presence in water sector in the country (Table 2).

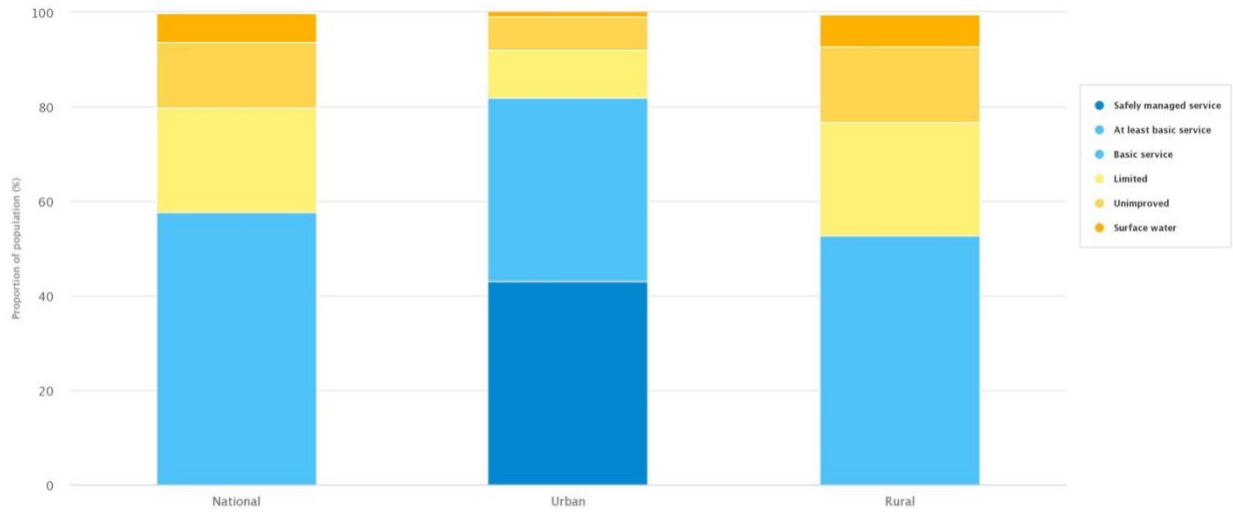
Belgian organisations with projects in Rwanda over the course of the past 10 years

Twenty-six Belgian organisations having expertise in water have reported having been active in Rwanda between 2010 and 2019 (Table 3). Eight are NGOs, two are groups, eight are from the private sector, three are public agencies, one public utility, four are research institutions.

Academic water research in Rwanda over the course of the past 10 years

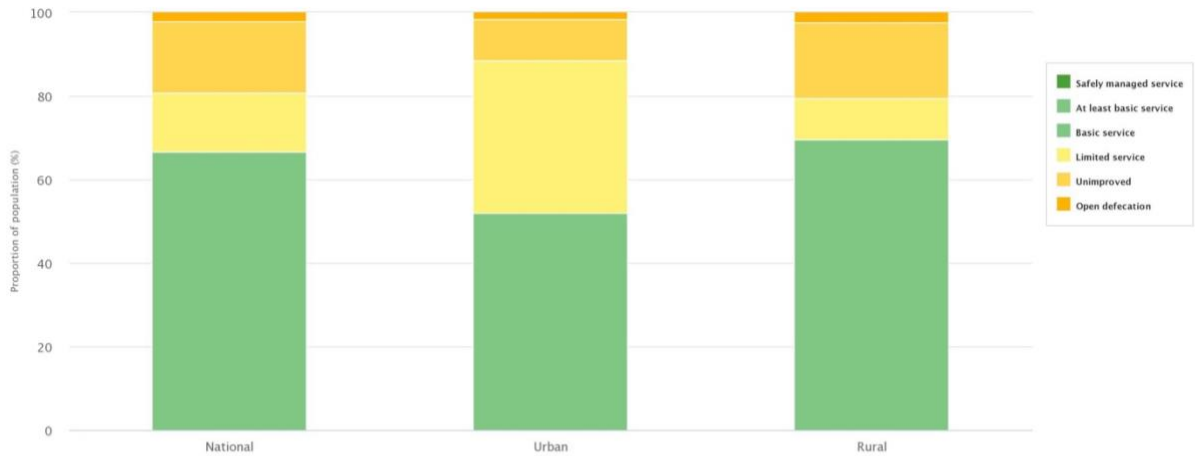
Five peer-reviewed papers have been published by research team including authors from Belgium and Rwanda. Research domains are in the field of fisheries and crop modelling (Table 4).

Figure 1. Proportion of population using drinking water services in Rwanda, by service level and by location (SDG6.1.1, 2017).



Data source: WHO, UNICEF
Exported from UN-Water <https://www.sdg6data.org> on 04 May 2020

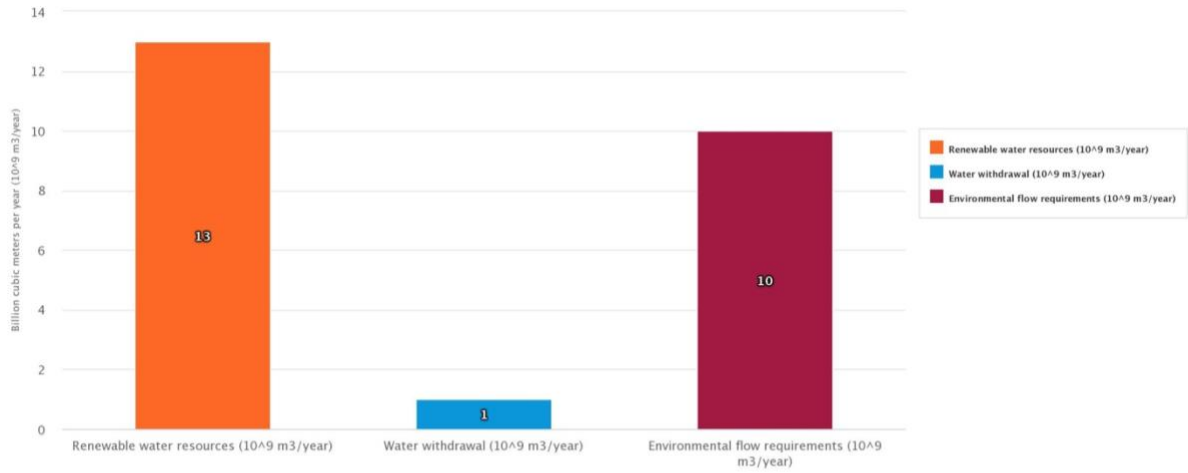
Figure 2. Proportion of population using sanitation services in Rwanda, by service level and by location (SDG6.2.1a.; 2017).



Data source: WHO, UNICEF
Exported from UN-Water <https://www.sdg6data.org> on 04 May 2020

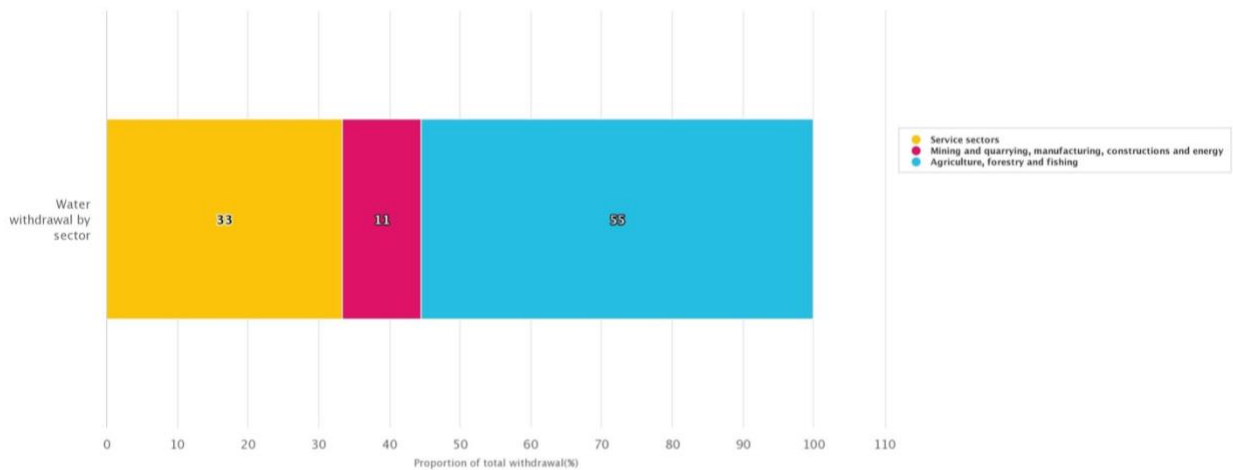
Figure 3. Water resources and withdrawal in Rwanda, per capita and by source.

- Long-term average annual precipitation in depth: 1,212 (mm/year) (2017)
- Renewable water resources: 1,089 m³ per capita (2017)
- Water withdrawal: 18 m³ per capita (2000)
- Environmental flow requirements: 75 % of the renewable water resources (2017)



Data source: FAO
Exported from UN-Water <https://www.sdg6data.org> on 04 May 2020

Figure 4. Water withdrawal by sector in Rwanda, as a percentage of total water withdrawal (2000,2005).



Data source: FAO
Exported from UN-Water <https://www.sdg6data.org> on 04 May 2020

Figure 5. Total Belgian ODA to water per sub-sectors, with the ODA to Rwanda highlighted in blue.

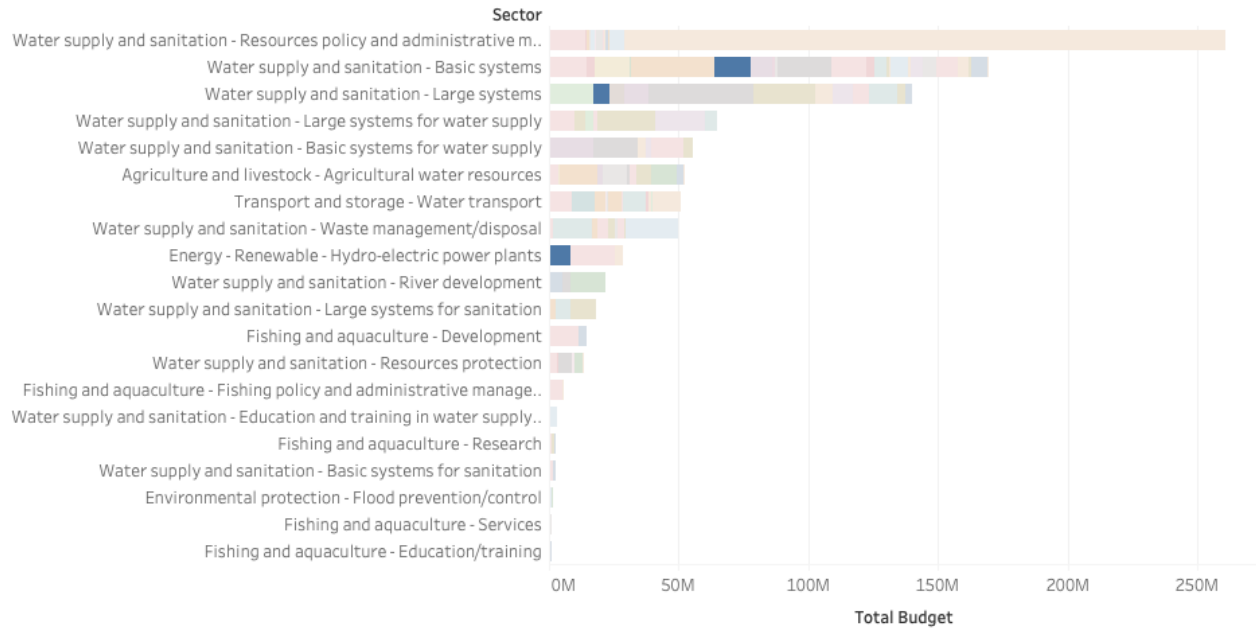


Figure 6. ODA to water (blue) in comparison to other sectors (grey) in Rwanda. The size of the circle is proportional to the budget.

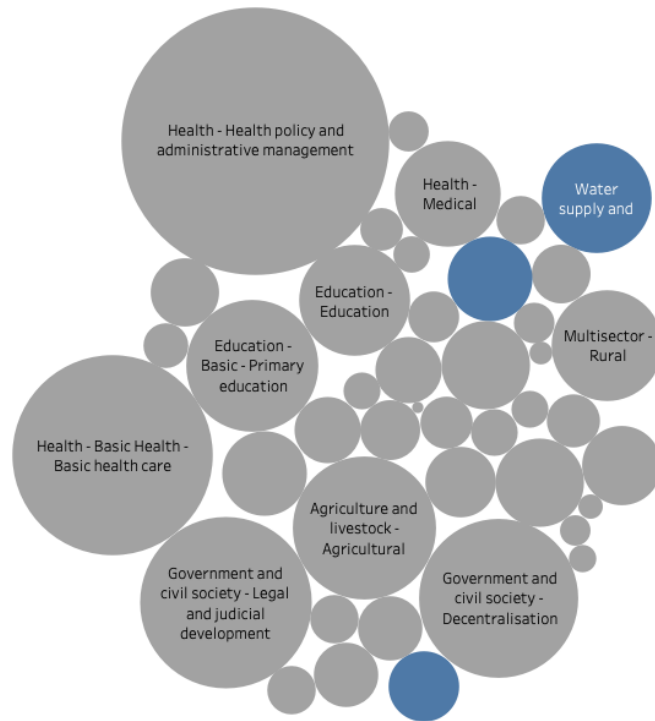


Figure 7. Contractors per water sector.

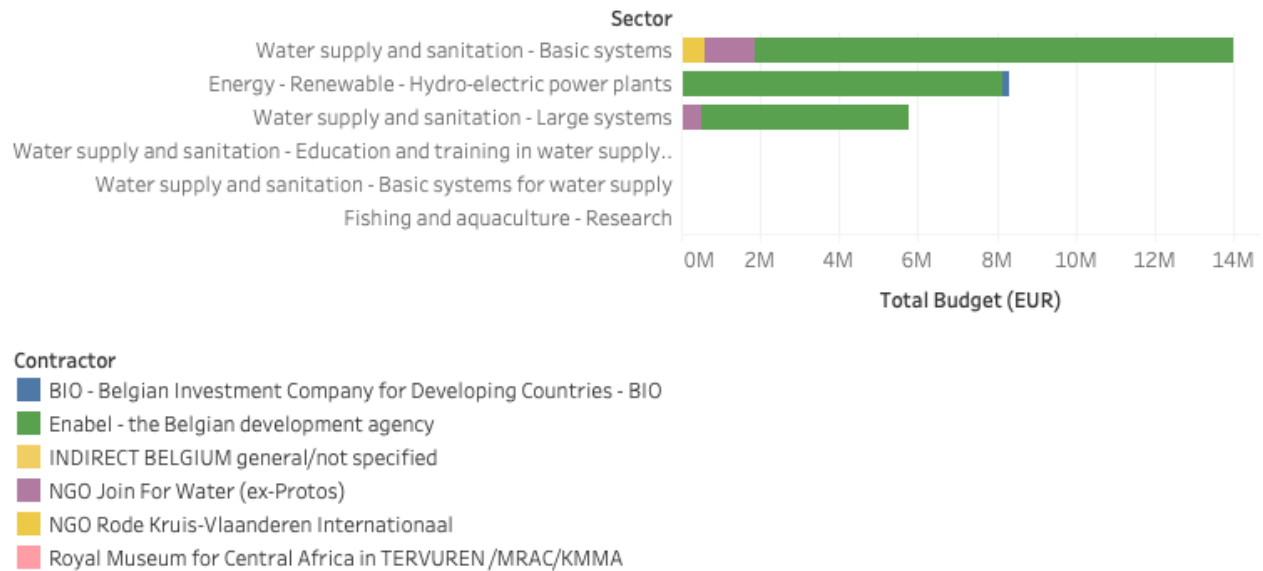


Table 1. List of water projects funded by Belgian ODA.

Typology: **B01**-Core support to NGOs, other private bodies, PPPs and research institutes; **C01**-Project-type interventions; **D02**-Other technical assistance.

Contractor	Type	Title	Effective Start Dt	Effective End Dt	Budget (EUR)
BIO - Belgian Investment Company for Developing Countries - BIO	D02	BIO - Fonds d'Expertise - Rwanda Mountain Tea - Giciye Hydro Power Project		31-12-2014	150000
Enabel - the Belgian development agency	C01	Eau potable phase 2 - PEPAPS II	22-01-2009	21-01-2014	12100223
	C01	Constructie van hydro-elektrische micro-centrales in de oostelijke provincie van Rwanda, bijkomende steun	28-08-2007	13-12-2012	4250787
	C01	Programme d'adduction d'eau potable en milieu rural au province de Butare (5 districts)	27-11-2005	27-11-2011	5260593
	C01	Construction micro centrales hydro-électriques	13-11-2006	27-11-2010	3905920
INDIRECT BELGIUM general/not specified	C01	Province de Limbourg: puits d'eau			
NGO Join For Water (ex-Protos)	B01	Duurzame toegang tot en beheer van water in de Grote Meren	01-01-2011	31-12-2013	540328
	B01	Protos - Programma 2014-2016 - Rwanda Toegang tot en beheer van water en sanitatie	01-01-2011	31-12-2016	757194
	B01	Waterbeheer rond de Grote Meren	01-01-2008	31-12-2010	509199
	C01	Aide de la province Flandre-Orientale: COFORWA distribution d'eau	31-12-2001		
NGO Rode Kruis-Vlaanderen Internationaal	B01	Sustained use of sufficient safe water et sanitation facilities, as well as sustained safe hygiene attitudes et practices by the target population by 2021.	01-01-2017		575705
Royal Museum for Central Africa in TERVUREN /MRAC/KMMA	B01	6	01-01-2019		

Table 2. Development cooperation on water as reported by national development agencies.
Three options are provided: absent, minor presence (X), major presence (XX).

	BE	CH	DE	EU	FR	NL	US
Benin		X	X			XX	X
Burkina Faso	X	XX	X				
Burundi	XX		XX				
DR Congo	XX	X	X		X	X	XX
Guinea	X	X			X		
Mali	X	X	XX			XX	X
Morocco	X	X	XX		X		
Mozambique	XX	XX	XX		X	XX	X
Niger	X	XX			X	X	X
Palestine	X	X	X		X	X	X
Rwanda						X	X
Senegal	X	X			X	X	X
Tanzania	XX	X	X		X	X	X
Uganda		XX	XX		X		XX

Sources

- BE Importance based on ENABEL projects (budget and number) - Rwanda has a large track record in water, but ENABEL does not have projects since 2016
- CH Countries in which projects of the Swiss Global Water Programme are reported (major presence based on heat map in the report)
- NL <https://openaid.nl/sectors/140/?tab=countries> (major presence based on overall budget to water)
- DE Based on GIZ project database - https://www.giz.de/projektdaten/index.action?request_locale=en_GB#?region=3&countries=NE (major presence in the water sector defined as water and sanitation projects > 10 mio Euro)
- FR <https://www.afd.fr/fr/page-thematique-axe/eau-et-assainissement> (no clear difference in country presence)

Table 3. Belgian organizations in the water sector that reported having had projects in Rwanda over the course of the past 10 years. Source: [Water Nexus database of water Actors](#). Might not be a comprehensive list.

Sector	Acronym	Name	Website	Keywords	Description
Government-recognised NGO	Join For Water	Protos - Join For Water	www.joinforwater.ngo	Sanitation Chain- Water Provision- Water Resource Management- Lobby- Participation- Capacity Building	Join For Water reinforces an equitable, sustainable and participatory water management and water use: our mission explains what we understand by this and how we wish to put this into practice.
	DBA	Défi Belgique Afrique	https://ongdba.org/	Agriculture Familiale -Ecms-Projets Sud -Sensibilisation	DBA est une ONG qui souhaite encourager et accompagner les citoyens de Belgique, enparticulier les jeunes dans une prise de conscience des enjeux du monde contemporain. Nos projets se basent sur deux principaux axes : 1) L'éducation à la citoyenneté mondiale et solidaire 2) L'agriculture familiale. La problématique de l'eau est une de nos principales préoccupations pour les projets SUD.
	VSF / DZG	VSF Dierenartsen Zonder Grenzen Belgium	www.veterinairessansfrontieres.be - www.dierenartsenzondergrenzen.be	Animal Water Supply	/
	CI.be	Caritas International	www.caritasinternational.be	Food Security-Agroecology-Livelihoods-Humanitarian Aids-Migration	La thématique principale de nos activités est "la sécurité alimentaire" (dans lequel s'intègrent différentes activités liées à l'eau) ou la réponse à des catastrophes.
	BRC	Belgian Red Cross	www.croix-rouge.be	Nutrition-Water	/
	AZV MSV	Artsen Zonder Vakantie Médecins Sans Vacances	www.azv.be	Medics - Hospitals - Medical Science	/
	CRB	Croix-Rouge de Belgique	www.croix-rouge.be	WASH-Réduction Des Risques De Catastrophes-Nutrition (Wash In Nut)	/
	ETM - KDW	Enfance Tiers Monde/Kinderen Derde Wereld	www.efancetiersmonde.be	Vulnerable Children and Youth- Empowerment- Re-Integration	/

Sector	Acronym	Name	Website	Keywords	Description
Platform / group / center	Ovo	ondernemers voor ondernemers	www.ondernemersvoorondernemers.be	Entrepreneurship- Loans	/
	11.11.11	Koepel van de Vlaamse Noord-Zuidbeweging	www.11.be	Policies- Accesibility- Climate Change	Movement working together with other movements worldwide, with focus on ecological and democratic subjects.
Private sector organisation	Eloy	Eloy Water	www.loywater.com	Prefabricated Solutions- Ready-To-Use Solutions- Water Treatment	/
		Metaphora		Strategy- Strategic Plans	/
	Hyrdo-rdi	Hydro-R&D International	www.hydro-rdi.eu		/
		Sotrad Water	www.sotradwater.be	Treatment- Pumps- Ultra Filtering- Stockage- Solar-	/
	JLA Hydro	JLA Hydro SPRL	www.jlahydro.be	Hydraulic Energy	/
	W+B	Witteveen+Bos	https://www.witteveenbos.com/nl/belgie/	Engineering Projects- Sustainable Development Goals-Impact-Designing For The Future	As an engineering and consultancy firm, we advise and help clients all over the world in resolving today, complex challenges. With a network of 21 offices in 11 countries and some 1,100 engineers and consultants, we work on improving the human environment for everyone, today and for future generations. Together with our stakeholders, we contribute to social, ecological and economic progress, with the sustainable development goals of the United Nations serving as an inspirational guideline.
	SHER	SHER Ingéneurs-Conseils s.a.	www.sher.be	Impact Research- Water Treatment- Alimentation- Potable Water- Irrigation- Hydroelectricity	Water research office.

Sector	Acronym	Name	Website	Keywords	Description
	Nature Energie	Nature Energie		Moulin -Hydroelectricité- Raccordement -Comptage	Nature energie est une entreprise privée qui fabrique tout type d'équipement hydraulique et électromécanique qui est mis en service par GISELA HYDRO.
Public agency	Enabel	Belgian Development Agency			/
	AWEX	Agence wallonne à l'Exportation et aux Investissements étranger	https://www.awex.be/	International funding- Mobilité-Investissement- Exportation	AWEX aide les entreprises wallones à investir à l'étranger à travers, notamment, des entreprises dans le secteur de l'eau.
		VVOB	www.vvob.org	Strengthen Educaton Systems Worldwide	Strengthening education systems worldwide. Possibility to provide education and training for water technicians trough programmes in technical and voctional education.
Public utility / enterprise	VLIR-UOS	Vlaamse Interuniversitaire Raad - Universitaire Ontwikkelingssamen werking	www.vliruos.be	Higher Education- Outreach	/
Research institute or team; Knowledge center	UOC - Uliège	Unité Océanographie Chimique - Université de Liège	www.co2.ulg.ac.be	Emission- Greenhouse Gasses-Co2-Ch4- Rivers- Lakes	Nos recherches portent sur les émissions de gaz à effet de serre par les rivières et les lacs.
	KU Leuven	Universiteit Leuven	www.ees.kuleuven.be/fnl/		/

Sector	Acronym	Name	Website	Keywords	Description
Research institute or team; Knowledge center	UCLouvain-ELI-GERU	UCLouvain, Earth and Life Institute	https://uclouvain.be/en/research-institutes/eli/eli	Agro-Hydrology-Erosion And Land Conservation-Remote Sensing And Hydrogeophysics-Irrigation / Drainage -Soil Water Plant Relationships-Integrated Water Resources Management	ELI pioneers fundamental and applied research to understand the basic processes of the Earth & Life system. The Institute designs research-based solutions at different scales to meet the major challenges associated with the sustainable development of the Earth and Life System. ELI promotes and stimulates interdisciplinary interactions between scientists of complementary expertise that aims to understand the processes controlling the dynamics of the Earth and Life systems at spatial scales deriving from molecules to organisms populations up to global cycles, and time scales from sub-daily to millions of years; to identify drivers of change through quantitative monitoring of indicators and application of hierarchical models; and to innovate in technical management and regulation, both in natural and industrial processes and systems, including renewable resource development and agricultural policy.
	UAntwerp	University of Antwerp	https://www.uantwerpen.be/en/centres/environment-sustainable-development/	River Basin Management-Ecosystem Services-Water Technology-Water Governance-Toxicology	NA

Table 4. Peer-reviewed, academic publications on water co-published with researchers from Belgium and Rwanda between 2010 and 2019. Belgian authors are in bold font.

Authors	Belgian Insitutions	Title	Year	Journal	DOI
Rukera Tabaro S., Mutanga O., Rugege D., Micha J.-C.	Université de Namur, Unité de recherche en biologie environnementale et évolutive, Département de Biologie, Namur.	Optimum rabbit density over fishponds to optimise Nile tilapia production in an integrated rabbit-fish system in Rwanda.	2012	African Journal of Aquatic Science	https://doi.org/10.2989/16085914.2012.679249
Rukera Tabaro S., Mutanga O., Rugege D., Micha J.-C.		Rearing Rabbits Over Earthen Fishponds in Rwanda: Effects on Water and Sediment Quality, Growth, and Production of Nile Tilapia <i>Oreochromis niloticus</i> .	2012	Journal of Applied Aquaculture	https://doi.org/10.1080/10454438.2012.679155
Butare L. , Rao I., Lepoivre P. , Polania J., Cajiao C., Cuasquer J., Beebe S.	Université de Liège, Gembloux Agro-Bio Tech, Unité de Phytopathologie, Gembloux.	New genetic sources of resistance in the genus <i>Phaseolus</i> to individual and combined aluminium toxicity and progressive soil drying stresses.	2011	Euphytica	https://doi.org/10.1007/s10681-011-0468-0
Rutebuka J. , Kagabo D.M., Verdoodt A.	Ghent University, Department of Environment, Gent.	Farmers' diagnosis of current soil erosion status and control within two contrasting agro-ecological zones of Rwanda.	2019	Agriculture, Ecosystems and Environment	https://doi.org/10.1016/j.agee.2019.03.016
De Bauw P. , Vandamme E., Senthilkumar K., Lupembe A., Smolders E. , Merckx R.	Katholieke Universiteit Leuven, Dept. of Earth and Environmental Sciences, Leuven.	Combining phosphorus placement and water saving technologies enhances rice production in phosphorus-deficient lowlands.	2019	Field Crops Research	https://doi.org/10.1016/j.fcr.2019.03.021

